month of any year from B.C. 2000 to A.D. 2000.

Lo! the wondrous and unerring regularity of the works of nature. And,—"Nature is but the name for an effect, whose cause is GOD."

We need scarcely say for how many purposes these tables will be found valuable, or that the name of Professor de Morgan is sufficient assurance of their correctness.

The Family Tutor and School Companion—*The Family Friend*. London: Houlston and Stoneman. 1851.

We can cordially recommend these serials to such of our young friends as would usefully invest a few pence weekly, or to their overlookers who would do it for them. The first will be a welcome aid to many strugglers.

Penny Maps. Chapman and Hall, Piccadilly.

THE tenth part of this very cheap atlas has been published, and contains the Austrian Empire, Egypt and Arabia Petrea, Nubia and Abyssinia. The names of places are very clearly printed.

Miscellanea.

IMPROVEMENTS IN THE METROPOLIS.—The seventh report of the commissioners appointed to inquire into and consider the most effectual means of improving the metropolis, and for providing increased facilities of communication within the same, has been presented to both Houses of Parliament. The commissioners report that the parishes of St. Paul, Covent-garden, and of St. Martin's-in-the-fields, having declined to contribute in any way to the progress of these contemplated improvements, and the branch line to Hart-street having been proposed more for the convenience of the locality than for the advantage of the public, all further proceedings having reference to the formation of this line should be suspended, until the parishes in question, or one of them, shall come forward with a reasonable contribution in aid of the same. The commissioners are also of opinion, that the opening of a line of communication, leading diagonally from the junction of St. Martin's-lane, Cranbourne-street, and Long-acre, into King-street, Covent-garden, would both improve the condition of the district locally, and would also give to the public greater facilities in traversing an intricate and very populous portion of the town, and they recommend the execution thereof upon the following basis; viz., that assuming the first cost of the proposed main street to be, as estimated by Mr. Pennethorne, 55,763*l*., the necessary funds for carrying it into execution should be advanced by the Government; that, assuming the net or ultimate cost of the improvement to be, as estimated 29,116*l*., such cost should be borne as follows:—By the public, 16,146*l*.; by the Duke of Bedford, as his Grace's individual contribution, 10,000*l*.; by the Duke of Bedford, as a contribution from the parish of St. Paul, Covent-garden, 3,000*l*.

BANQUET TO THE FOREIGN COMMISSIONERS OF THE INDUSTRIAL EXHIBITION.—On Tuesday, the 20th, the Metropolitan Commissioners gave a grand entertainment at the Castle Hotel, Richmond, to the Foreign Commissioners then in London, and who must have been well pleased with their reception at Richmond, where laurels and flags of all nations were displayed in great profusion. Cheers were not wanting any more than expressions of "welcome;" and a congratulatory address from the inhabitants was read on the beautiful lawn belonging to the hotel. About 200 persons sat down to dinner, including many foreign ministers. Lord Ashburton occupied the chair, and animated speeches were delivered by the Baron C. Dupin, Lord Granville, the Belgian Minister, and others. The day was beautiful, and all passed off well. A little mistake was made by those who managed the dinner, in terming it an entertainment given by the *Council of Chairmen* of the Metropolitan Committees. It was contributed to by the Metropolitan Commissioners generally.

A WORD ABOUT CONTRACTS.—I have frequently of late seen advertisements for tenders in your paper with the following clause:—"The committee do not pledge themselves to accept the lowest or any tender if not approved." Now I cannot help thinking this a mean and dishonourable way of proceeding. It would seem the committee, not satisfied with obtaining plans in the usual shabby way of offering a paltry premium (5*l*. probably), must put ten or twelve builders to the expense of estimating the cost of carrying out the design without the slightest certainty of being remunerated for their trouble. It would be a very small contract where the expenses out of pocket would be less than 5*l*. without any allowance for the contractor's own time. What right have they to tax the pockets of contractors to the amount of 50*l*. or 60*l*. to ascertain the costs of their works, and then free themselves of all liabilities, should the amount be more than they are inclined to spend? I need not point out how they ought to act in procuring designs, that has been done already; but when they are obtained they should be satisfied by a *competent* surveyor what the cost would be; and then, if their intentions are honourable, let them, if they *must* have competition, obtain tenders stating what per cent. profit upon the prime cost the contractors will undertake it for, the said cost to be computed by the surveyor employed by the committee, and agreed to by the contractor.

STAITE'S ELECTRIC LIGHT.—Public curiosity has been much excited to be made acquainted with the report of the committee who were appointed, so far back as August, to inquire into the adaptation of this light for general illumination. The committee having terminated their labours, the 9th inst. was the first time the exhibition took place of the apparatus, constructed with a view of testing the self-sustaining power of the mechanical arrangement adapted for the continued development of the light, the sustaining power of the battery, and the cost of the whole. At four the light was set in action, it being understood that it was to burn for five hours and a quarter without interruption, that being the period at which the committee had expressed themselves satisfied that it could be continued for any definite length of time. From four o'clock to six the light continued to burn with increasing brilliancy, giving successively a light, adjudged equal, the first half hour, to 200 candles, at five to three, at half-past five to 400, and so successively till the electric fluid came into its fullest action at half-past six, when the light, by the instrument used, developed the immense number of 700 candles, which intensity of light was steadily kept up till the experiment concluded at a quarter past nine o'clock. Coloured prints were brought from the influence of the direct sunbeam to that of the ray from the electric light, in which not the slightest difference of shade of colour could be observed. The light of each was then passed through the prism which still further established their identity, as their point of junction could not be ascertained, thus proving its immense value to the manufacturer and exhibitor of goods. Before the company separated, a portion of the solutions produced by the action of the battery were drawn off and precipitated, and a white powder produced, which was represented to be of a commercial value sufficient to pay the whole expense of producing the light.—*Condensed from Manchester Courier*.

TO PREVENT OAK FROM SPLITTING.—In answer to the request of your correspondent "J. M. H." for information as to "what will prevent oak mullions, or any other work left of its natural colour, splitting from exposure to the sun and wind," I would suggest to him that such a result would only be obtained by rendering the wood entirely free from moisture, and then immersing it in linseed oil, or some similar material. The first step might be insured by submitting it to the process of the Desiccating Company, whose office is in Gracechurch-street. It would then be especially prepared for the immediate absorption of the oil. I have had oak, British elm, and ash, served in this way to my entire satisfaction.

OLD SUB.

DELIVERY OF WATER THROUGH PIPES.—I send you the following results of calculations made with reference to the queries of your correspondent "Aquarius," in a recent number of "The Builder." The diameter of the pipes at the *point* of delivery should be 2 inches. At the low level in the intervening valley 1¾ inches, and no where less than 1½ inches. These, it is to be observed, are the bores required by *theory*, and suppose the piping to be laid without any *sharp turns* either in a vertical or horizontal plane. To allow, however, for accumulation of deposit, corrosion, &c. in the pipes, I should recommend the last 8,000 feet to be laid 2¼ inches, and the remainder 2 inches.—A. W. MAKINSON.

EDUCATIONAL INSTITUTION AT BOLTON.—A correspondent states that the Committee of the Church Educational Institution at Bolton, who advertised for designs in THE BUILDER some time since, have decided in favour of the design of Mr. R. H. Potter, of London. The style is decorated.

INSTITUTE OF ARCHITECTS.—On Monday next a conversazione (the first of a series) will be held, when the President of the Institute, Earl De Grey, will present the royal gold medal to Professor Donaldson.

MARKET-HOUSE.—STOCKPORT COMPETITION.—The premium of 50*l*. offered by advertisement for the best design for a Market-house, Stockport, has been awarded to the two designs, bearing the motto "*Haut et bas*," and found to be by Messrs. Stevens and Park.

ADMISSION TO WESTMINSTER ABBEY.—The dean and chapter have appointed two interpreters to assist the ordinary officers of the edifice in explaining its chief features. There is no charge for admission.

THE ARCHITECTURAL ASSOCIATION will hold a conversazione at Lyon's Inn-hall, Strand, on Friday, the 30th, when a paper will be read. This meeting is intended to be the first of a series, and is open to any provincial architects and others who may be in London.

TENDERS

For the City of London Consumption Hospital. Mr. S. Ordish, architect.

Cubitt	£13,497	0	0
Lee	13,209	0	0
Curtis	10,644	0	0
Piper	10,599	0	0
Myers	10,430	0	0

Industrial Schools, Highgate. Mr. Salvin, architect.

Jansen	£4,644	0	0
Lawrence	4,394	0	0
Nowell	4,263	0	0
Haward and Nixon	4,337	0	0
Appleford	4,280	0	0
Plowman	3,978	0	0
Kelk	3,970	0	0
Holland	3,750	0	0
Myers	3,729	0	0

TO CORRESPONDENTS.

"H. H. R.," "F. and B.," "An Old Surveyor," "M.," "W. B. S." (we have not yet seen the design), "R. T. J.," "W. P. M.," "C. F., jun.," "J. B. W." (under consideration), "Sir W. J.," "Baron G.," "B. T.," "Mr. L.," "S. L.," "Lover of Science," "R. J. S." (we have not seen the book), "J. A. W.," "Old Subscriber," "W. T.," "Mr. S.," "H. H. R.," "J. H.," "J. B.," "J.," "R. W. K.," "A. E." (sent in error), "J. P. S.," "X. Y. Z.," "Q. in corner" (the liability would depend on previous arrangement), "A Builder" (Paving Commissioners Clerks are sometimes very pompous persons. We have a London specimen at this moment in our eye, and may one day exhibit him).

BOOKS.—Notices of various Books are unavoidably postponed.

NOTICE.—All communications respecting *advertisements* should be addressed to the "Publisher," and not to the "Editor;" all other communications should be addressed to the EDITOR, and not to the Publisher.

ADVERTISEMENTS.

ROYAL ACADEMY of ARTS, TRAFALGAR-SQUARE.—The EXHIBITION of the ROYAL ACADEMY is NOW OPEN.—Admission (from Eight o'Clock till Seven), One Shilling. Catalogue One Shilling.
J. P. KNIGHT, R.A., Sec.

THE NEW SOCIETY of PAINTERS in WATER COLOURS.—The Seventeenth ANNUAL EXHIBITION of this Society is NOW OPEN at their Gallery, 53, Pall Mall, near St. James's Palace, from 9 o'clock till dusk. Admission 1s.
JAMES FAHEY, Sec.

COLOSSEUM.—Change of Panoramas.—The original and unrivalled PANORAMA of LONDON painted by Mr. Parris, will be EXHIBITED with the other work painted by the Proprietors of this Establishment, entirely re-embellished, from half-past Ten till Five. The grand PANORAMA of PARIS by NIGHT, by Dayone and Bouton, from Seven till half-past Ten. The most admired scenes from Two till Five, and during the evening, when the commemoration, colours, &c. are brilliantly illuminated. Admission, Day or Evening, 2s.; children and schools half-price. CYCLORAMA, Albany-street, admission 1s. A great variety of Views of Athens and the Earthquake in 1853 to be seen daily at Three, and in the evening at half-past Seven and Nine o'clock, illustrated by appropriate music on the new grand apollonicon. Children and schools half-price.